

... , ...

... , ...

(9g, 10<sup>36</sup> , , 60 )

...

(9g, 10<sup>36</sup> , , 60 )

...

«

» (

0104U002080)

[1-3].

36 - 120-130 , 200-

230<sup>-</sup>, 260-280

9g 10

( )

( - 1 50 g, - 50 , -2/500 - 0,6-0,8 g/ ) - 1,6 g/ ,

( 60 )

( )

( )

( )

: = /N, = /N, = / ×100%.

AN-50.

520°

12

0,05

( ):

$$HC = \frac{l}{\sqrt[3]{m}}$$

$l$  - ;  $m$  -

AAS-3 ( -26,

10%

« - »,

Olympus C5050Z

Olympus X-31

Image J.

Cn-BV/TV,

Ct.Wi.

American Society of Bone and Mineral Research [4].

33,39% (p<0,05) 40,78% (p<0,05)

( . 1).

16,67% (p<0,05)

8,45% (p<0,05).

( . 2).

14,36% (p<0,05)

Cn-BV/TV  
Ct.Wi

( . 3).

3,26% (p<0,05) ( . 1).

6,31% (p>0,05).

4,64% (p<0,05),

3,30% (p<0,05) 2,79% (p<0,05)

( . 2).

Cn-BV/TV 15,28% (p<0,05)

Ct.Wi

4,35% (p<0,05)

( . 3).

( , , ),

( . 1).

4,38% (p<0,05).

( 4,19% (p<0,05)

11,26% (p<0,05) ( . 2).

7,81% (p<0,05)

Cn-BV/TV 11,24% (p<0,05)  
( . 3).

Ct.Wi

I –

			, / 3	, / 3	, %
2		1,26±0,02	1,01±0,03	0,53±0,02	53,13±0,70
		1,30±0,01	1,35±0,07*	0,75±0,03*	55,42±0,62*
6		1,29±0,01	1,10±0,05	0,65±0,02	59,28±0,98
		1,25±0,01*	1,03±0,02	0,64±0,01	62,03±0,70*
12		1,33±0,01	1,72±0,04	0,54±0,02	61,27±0,96
		1,27±0,01*	1,80±0,05	0,53±0,01	60,17±0,55

\* – <0,05( )

2 –

(%)

				a/P		
2		35,39±0,14	17,95±0,25	1,97	0,73±0,01	0,20±0,01
		35,88±0,32	18,34±0,33	1,96	0,67±0,02*	0,23±0,01*
6		34,28±0,23	18,11±0,02	1,89	0,53±0,03	0,36±0,02
		35,41±0,18*	18,62±0,09*	1,90	0,51±0,01	0,37±0,01
12		36,10±0,23	18,31±0,05	1,97	0,49±0,01	0,37±0,01
		34,59±0,09*	18,05±0,18	1,92	0,52±0,02	0,41±0,02*

3 –

		Cn-BV/TV,%	Ct.Wi,
2		30,32±0,69	121,94±1,14
		34,68±0,28*	122,04±0,35
6		39,85±0,93	130,82±0,61
		33,76±0,39*	136,51±0,35*
12		42,58±0,40	116,05±0,60
		37,79±0,46*	125,11±0,84*

[5].

68%.

Eswaran et al. [6],

[7].

1.

2.

## SUMMARY

### INFLUENCE OF CHRONIC GRAVITATIONAL OVERLOADS ON BONE TURNOVER OF VERTEBRAE OF RATS OF VARIOUS AGE

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*Influence of gravitational overloads on processes of bone turnover of vertebrae was investigated. 36 rats of three age periods were subjected to hypergravity (9g, 10 minutes, daily, 60 times). It is revealed that hypergravity activates turnover of vertebrae in 2-month-old rats, while osteogenesis was inhibited in 6 and 12-month-old rats.*

**Key words:** hypergravity, age, bone turnover.

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